DOCUMENT RESUME

ED 401 480 CE 073 024

AUTHOR Spangenburg, Cathy
TITLE Implementing a School-to-Work Transition System: A Rochester, New York, Case Study.
INSTITUTION National Center on Education and the Economy, Washington, DC.
PUB DATE Apr 95
NOTE 51p.
AVAILABLE FROM National Center on Education and the Economy, 700 11th Street, NW, Suite 750, Washington, DC 20001 ($9.95).
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS Advisory Committees; *Articulation (Education); Case Studies; Cooperative Planning; *Education Work Relationship; Elementary Secondary Education; Job Training; Models; *Partnerships in Education; Pilot Projects; Postsecondary Education; Program Costs; Program Design; Program Implementation; School Business Relationship; *Strategic Planning; *Systems Approach; Work Experience Programs
IDENTIFIERS *Rochester City School District NY

ABSTRACT

This report documents the Rochester (New York) City School District's efforts to develop and implement a school-to-work transition system featuring the following elements: activities at the elementary, secondary, and postsecondary levels; combined formal schooling and structured on-the-job training based on nationally recognized standards; curriculum focused on qualifications required for entry-level work in rewarding careers; job experiences permitting exploration of diverse careers under guidance of skilled mentors; and classwork providing the experience/credits needed to pursue a college education. The report covers the following topics: development of Rochester's school-to-work model and its components; designing and piloting models/successful programs; preliminary results and costs; steps to creating successful models; challenges faced by Rochester in moving from pilot to full-scale implementation; and step-by-step recommendations for implementing school-to-work transition systems. Appendixes contain the following: list of organizations serving on Rochester's school-to-work transition task force; Rochester's school-to-work transition policy and strategic framework; matrix of Rochester's school-to-work activities and definitions; sample model school-to-work programs and activities; overview of the Rochester Business Education Alliance; roles/responsibilities of school-to-work director and organizational infrastructure chart; and lists of Rochester's school-to-work transition advisory board members and 29 products/publications from the National Center on Education and Economy and Rochester City School District. (MN)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

NATIONAL CENTER ON EDUCATION AND THE ECONOMY

ED 401 480

IMPLEMENTING A SCHOOL-TO-WORK TRANSITION SYSTEM:

A Rochester, New York, Case Study

By Cathy Spangenburg

April 1995

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

C Spangenburg

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

ROCHESTER PROGRAM

CE 073024

BEST COPY AVAILABLE

THE NATIONAL CENTER ON EDUCATION AND THE ECONOMY

The National Center on Education and the Economy, a not-for-profit organization, is dedicated to the development in the United States of a comprehensive system of education, employment and training second to none in the world. The National Center engages in policy analysis and development, institutional design, technical assistance and professional development. The programs in the Center's portfolio include New Standards (jointly managed with the Learning Research and Development Center at the University of Pittsburgh), the National Alliance for Restructuring Education (one of the nine "break the mold" programs funded in part by the New American Schools Development Corporation), the Workforce Skills Program (formed to implement the recommendations of the Commission on the Skills of the American Workforce) and the Center's Rochester Program. Among the arenas in which the National Center is currently working are student performance assessment, school-to-work transition, integrated social and health services, labor market systems and policy, qualifications systems design, occupational skill standards, school and school system restructuring, and the adaptation of the private sector's most successful management and organization techniques to the needs of the education and training sector.

THE NATIONAL CENTER ON EDUCATION AND THE ECONOMY

BOARD OF TRUSTEES

John Sculley
Chair

James B. Hunt, Jr.
Vice Chair

R. Carlos Carballada
Treasurer

David J. Barram
Patricia C. Barron
Anthony P. Carnevale
Sarah H. Cleveland
Thomas W. Cole, Jr.
Phyllis Eisen
Harry E. Featherstone
VanBuren N. Hansford, Jr.
Louis Harris
Guilbert C. Hentschke
Sonia C. Hernandez
David W. Hornbeck
Vera Katz
Arturo Madrid
Shirley M. Malcom
Ray Marshall
John R. McKernan, Jr.
Richard P. Mills
Bertha O. Pendleton
Philip H. Power
Lauren B. Resnick
Marc S. Tucker
Adam Urbanski

Marc S. Tucker
President

IMPLEMENTING A SCHOOL-TO-WORK TRANSITION SYSTEM:

A Rochester, New York, Case Study

BY CATHY SPANGENBURG

April 1995

A PUBLICATION OF THE ROCHESTER PROGRAM
NATIONAL CENTER ON EDUCATION AND THE ECONOMY

©National Center on Education and the Economy, 1995

All rights reserved. Brief quotations from this report may be reproduced without restriction, provided that acknowledgment is given to the Rochester Program of the National Center on Education and the Economy. Longer portions of this publication may not be reproduced without permission of the copyright owner.

ROCHESTER PROGRAM

The Rochester Program of the National Center on Education and the Economy is an organization that designs and demonstrates strategies, processes and products that cause district-wide systemic change and result in higher levels of student performance. Rochester program staff have expertise and capabilities in five areas: standards and assessment; learning environments (curriculum and instruction, school-to-work transition and instructional technology); community supports and services; high performance management; and public engagement. The Rochester Program works collaboratively with five primary partners: the Rochester City School System, the Rochester Business Education Alliance; CHANGE — an integrated social services effort, Rochester's Community Alliance Schools; and the National Center's other national programs.

TABLE OF CONTENTS

Introduction 1

How Rochester Began 1

Rochester's School-to-Work Model:
What Does It Look Like? 3

Designing and Piloting Models and Successful Programs 3

Preliminary Results and Costs 7

How to Create Successful Models 7

Rolling Out Success: The Challenges Rochester
Faces Moving from Pilot to Full-Scale Implementation 9

Step-by-Step Recommendations on How to Implement
a School-to-Work Transition System 11

Conclusion 14

Appendices

A. Organizations Serving on Rochester's School-to-Work Transition Task Force 17
B. Rochester City School District School-to-Work Transition Policy . . . 18
C. Rochester's School-to-Work Transition Strategic Framework 24
D. School-to-Work Transition Matrix of Activities and Definitions 28
E. Examples of Rochester's Model School-to-Work Programs and Activities 30
F. Rochester Business Education Alliance: An Overview 35
G. Roles and Responsibilities of School-to-Work Transition Director and Organizational Infrastructure Chart 36
H. Rochester's School-to-Work Transition Advisory Board 38

List of Products/Publications Available from the National Center on Education and the Economy 39

List of Products/Publications Available from the Rochester City School District 41

INTRODUCTION

The passage of the federal *School to Work Opportunities Act* calls for the integration of work-based and school-based learning for all students in the United States. As a result, many communities will be embarking on the complex task of implementing a school-to-work transition system for their young people. With assistance and guidance from the National Center on Education and the Economy, Rochester, New York, began this journey more than three years ago. Serving as a model, Rochester's experience can aid other communities as they work to implement a school-to-work transition system. By no means is Rochester's work complete. It is work in progress. Rochester has success stories and has learned a great deal from its past efforts.

The purpose of this report is to document Rochester's efforts and offer its case study as an aid to other local communities as they embark on a similar effort to implement a school-to-work transition system. This document is an account of what Rochester set out to do and what has been accomplished thus far. The intended audience is any educator, business person, policy maker, or community member who wants to take the lead in improving the education and training system in his or her community or state. Model school-to-work programs and activities at the elementary, middle, high school and postsecondary level are described, as well as strategies and recommendations for how to implement a school-to-work transition system.

HOW ROCHESTER BEGAN

Rochester education reform efforts began in the early 1980s. Local education, business and community leaders saw low levels of student performance; an unskilled, ill-prepared future workforce; and social perils, including poverty and crime. These leaders believed that in order to help all students be successful, to reach the highest standards of achievement, and to leave school prepared for work and further education, changes must occur within and outside the education system. They realized that the economic vitality and standard of living of the community depended on these efforts. Thus, in 1990, the Rochester School-to-Work Transition Initiative was created in response to the recommendations made by the National Center on Education and the Economy's reports *America's Choice: high skills or low wages!* [1] (1990) and *High Expectations: What Rochester Students Should Know and Be Able to Do* [2] (1990). Both reports decried the lack of a school-to-work transition system and young adults' lack of work readiness, including academic and technical skills. These reports supported earlier conclusions made in *The Forgotten Half* [3] and *Workforce 2000* [4].

Throughout 1990 and 1991, the National Center assisted the Rochester City School District and the community in specifying what students should know and be able to do. Educators, business representatives and community members have defined student outcomes that include academic and applied learning/workplace skills. The Rochester City School District is a member of New Standards[5] — a grassroots partnership of states and urban school districts that is adopting a set of very high education standards and developing a new kind of assessment system designed to gauge student progress toward those standards. The primary goal of New Standards is

A new system of school-to-work transition for the majority of our youth has the following features:

• combined formal school and structured on-the-job training leading to a qualification for which nationally recognized skills standards have been set by the employers in the industry or industries for which the student is preparing;

• a curriculum that is intellectually demanding but that also requires students to apply what they know to the kinds of complex, real-world problems that will be encountered in the high performance workplace;

• a curriculum and set of work experiences focused enough to qualify the successful student for entry-level work in a rewarding career, but also broad enough to provide the student with the skills required for real mobility in a rapidly changing job market;

• job experiences that will enable the student to sample a broad range of careers and occupations and, under the guidance of a skilled mentor, acquire both the technical skills and the personal values and habits needed to be successful; and

• class work that includes both secondary and postsecondary courses that will give the student the experience and the credit needed to continue pursuing a college education as long as he or she wishes.

From ***A School-to-Work Transition System for the United States,*** *by Marc Tucker, National Center on Education and the Economy's Workforce Skills Program, April 1994.*

*In **A School-to-Work Transition System for the United States,** the National Center advocates for a three-tiered system of education and skills standards:*

- *The third tier would be standards for individual front-line jobs. Individual companies would set these standards for their employees.*
- *The second tier would be standards for broad clusters of front-line jobs, often encompassing multiple industries. The new National Skills Standards Board created through the **Goals 2000** legislation would be responsible for establishing the categories in which these standards would be set and would endorse certificates states would issue to people who meet these standards.*
- *The first tier of standards would be for general education — the standards that everyone in the society would be expected to meet. These standards would be benchmarked to the performance of 16-year-old students in countries where student performance was highest in the core academic subjects — English, mathematics and science — and would incorporate applied learning/workplace skills demanded by high performance work organizations. The New Standards consortium of states and school districts are developing these standards through the creation of the Certificate of Initial Mastery.*

to greatly improve the performance of all students, particularly those who perform least well now.

In March 1991, the National Center convened the School-to-Work Transition Task Force — a group composed of 35 individuals representing 26 organizations from throughout the Rochester community — to prepare a model for improving the transition of young people from school into the workplace. (Appendix A.) The Task Force laid out a 10-year plan for Rochester to improve the way it prepares students. This plan described what a school-to-work transition system would look like and included recommendations and a plan for implementation.

Rochester's School-to-Work Transition Initiative calls for helping young people master world-class academic standards; preparing them to make informed choices concerning further education and training; and creating opportunities for all students to acquire the academic, applied learning and technical skills needed to pursue rewarding careers. As part of this initiative, thousands of city school district students from pre-K through post graduation are participating in school-to-work programs and activities, including work-site tours, tutoring, mentoring, career development, community service, job shadowing, co-ops, internships, work study and youth apprenticeships.

In July 1992, the District appointed a Director of School-to-Work Transition, working under the District's Supervising Director of Workforce Preparation, to lead the District's efforts to design and implement the school-to-work transition model and integrate it into the District's restructuring strategy. In October 1992, the District convened an advisory board that includes representatives from business and industry, postsecondary education, profit and non-profit employers, teachers, administrators, students, parents and District staff to advise and support the District in its efforts to implement a school-to-work transition system. In Spring 1993, the Rochester Board of Education adopted a formal school-to-work transition policy. (Appendix B.)

Since 1990, Rochester has worked with and assisted New York state in responding to the need to better prepare New York state youth. In June 1992, the Governor's Task Force on Creating Career Pathways for New York State Youth released *Education That Works*, a report that recommended changes in public education that will better prepare young people to join the workforce. In August 1993, the District was chosen as one of 12 New York State Workforce Preparation pilot sites that are working to implement these changes. And in August 1994, Rochester and New York state won *School to Work Opportunities Act* grants to expand their implementation efforts.

In addition, Rochester is connected to and involved in national education reform efforts as a member of the National Center's National Alliance for Restructuring Education[6]. The New American Schools Development Corporation has provided funds to support the National Alliance in its effort to create break-the-mold schools and systems. Rochester has chosen 12 Community Alliance Schools — eight elementary, two middle and two high schools — to implement five design components that the National Alliance for Restructuring Education has defined as essential to restructuring

education. School-to-work transition is one component and an essential link in creating a new learning environment that will ensure that all students meet higher performance-based standards.

ROCHESTER'S SCHOOL-TO-WORK MODEL: WHAT DOES IT LOOK LIKE?

Rochester's comprehensive school-to-work transition system applies to all youth. It focuses on the need to develop work skills, academics and an understanding of one's interests through a varied curriculum. Rochester's curriculum is being restructured to include a wide variety of structured work-based experiences occurring throughout a person's educational experience, and to offer consistent delivery of career development information and opportunities for students pursuing technical training, postsecondary education or work. Based on labor market information and available career opportunities, employers, schools and other training providers are developing and making youth apprenticeships and other types of technical and professional training available to all qualified students who choose this path.

The Rochester School-to-Work Transition Initiative is also working to develop a coordinated support network for accommodating various needs, learning levels and backgrounds, allowing all students to attain higher academic and work standards, and moving young people smoothly into the world of work or postsecondary education. A new role for employers is recommended and required. Rochester has created a School-to-Work Transition Strategic Framework that lays out its vision, mission, strategic partners, goals and strategies for implementation. (Appendix C.)

DESIGNING AND PILOTING MODELS AND SUCCESSFUL PROGRAMS

Since it began implementation efforts, Rochester has designed and piloted a number of successful school-to-work transition models and programs at the elementary, middle, high school and postsecondary level. These model programs encourage students to achieve the highest standard of academic and applied learning/workplace skills. A group of educators, employers and community representatives developed a matrix and definitions of school-to-work activities that students can engage in at every level. This matrix and the definitions appear in Appendix D. A few examples of successful programs and activities in Rochester include:

Design Element #1:

Curriculum Linking School and Work — Elementary School

Two programs in Rochester are helping students link school and work. Through the **Junior Achievement** program, volunteers from the business community visit classrooms and lead activities with training and materials that are geared to specific grade levels. Through hands-on activities, Junior Achievement helps students learn and understand their place in the economy; see the relevance of education to their future; and explore career opportunities. Some examples of activities elementary students have had the opportunity to experience include: running their own business; planning the layout of a city; assembling donuts

In October 1991, the Rochester School-to-Work Transition Taskforce — a group composed of 35 individuals representing 26 organizations from throughout the Rochester community — made the following recommendations in a 10-year plan and model that they created to improve students' transition from school into the workplace:

- *Change the pre K-12 curriculum to link school and work, include a career awareness focus and develop work readiness skills to enable all youth to choose a career direction by the 10th grade.*
- *Involve employers as partners in the total educational process.*
- *Provide a coordinated support system that is linked to parents and available to every student who needs it.*
- *Establish technical training and youth apprenticeships that lead to meaningful career opportunities starting in the eleventh grade.*
- *Internalize school-to-work transition both within the District and the community.*

Rochester's school-to-work transition ***design elements*** *include:*

- *curriculum linking school and work — elementary, middle, high school and beyond;*
- *a support network for students;*
- *technical and professional training;*
- *employers as partners;*
- *public awareness and engagement; and*
- *staff development.*

The ***nine key principles*** *of Rochester's school-to-work transition system are:*

1. *Applies to all students.*
2. *Based on world-class academic and workplace skills.*
3. *School and work are linked.*
4. *Opportunities for students are tied to high performance.*
5. *Requires a systems approach to preparing all youth for future work, education and life.*
6. *Employers and community organizations are partners in the entire educational process.*
7. *A coordinated network of support services and people is provided to all students who need it.*
8. *Parents and the community are aware and involved.*
9. *Staff development is necessary.*

by both mass and unit production to learn about the American free enterprise system; and creating their own newspaper. Says Cathy Kurlan, Junior Achievement's vice president of operations, "The idea is to reach children at an early age and begin building in them a good work ethic." More than 11,000 students have participated in the Junior Achievement curriculum. Since 1992, more than 860 volunteers have taught in classrooms of 25 to 30 students.

Rochester elementary schools are also using **Talents Unlimited** to teach students applied learning skills. Developed in 1971 by the Division of Curriculum and Instruction for the Mobile County Public School in Mobile, Alabama, Talents Unlimited is a program designed to help teachers recognize and nurture multiple talents in all children. These include productive thinking, forecasting, communicating, decision-making and planning as well as academic talents.

Curriculum Linking School and Work — Middle School

At the middle school level, students begin to apply in a real workplace the skills that they are learning in school. Developed by Wegmans Food Markets, Inc., to combat the high dropout rate, the **Rochester Work-Scholarship Connection** offers jobs, scholarships, adult support, and workplace know-how to at-risk middle and high school students as incentives to stay in school and perform at a satisfactory level. More than 350 students are in the Work-Scholarship Connection program.

The skills learned on the job enable young people to see the relevance of their success in school with success on the job. The program's web of support includes a youth advocate, school sponsor, tutor, and job-site mentor. Often referred to as the young person's champion, the youth advocate is responsible for coordinating all of the resources that are available to students participating in the program. The youth advocate is a full-time professional who works with up to 30 students, tracking their academic, workplace and, when appropriate, social progress.

Work-Scholarship student Victor Cruz sums up his experience in the program, "I was one of the worst students. My grades were bad. I would hit people for no reason. My first semester in high school I had a .96 G.P.A. Now I am a sophomore, and I was on the honor roll last semester with a 2.5 G.P.A. I feel great. People compliment me. What led to this change? The great people who spent time with me and showed their concern for me — my teachers, counselors and the people, especially my youth advocate, in the Rochester Work-Scholarship Connection program. They introduced me to new things to get involved in, things that helped me change my outlook. Now I use my energy not in violent ways, but productively."

A second model program, **Rochester's Docent-Training Program,** called "The Power of Kids," is also helping students see the relevance of what they are learning in school to what they need to know in the real world. Through a partnership between Jefferson Middle School and Rochester's historic Center at High Falls, 24 eighth-grade students are not just learning local history, they are learning how to teach it to others. Classroom learning includes skills in research, writing, editing, speaking and listening. One day a week, the students apply those skills at the

Center, where they work with a variety of professionals, including museum docents and the city historian giving tours to other students and the public.

Curriculum Linking School and Work — High School and Beyond

The Rochester Fire Department, in cooperation with the City of Rochester and the school district, offers a two-year, 2,200-hour job training and work experience program for high school students interested in pursuing a career in fire fighting. Twenty-one students participated in the program the first year. A new class of 25 students has just begun the 15-week exploratory portion of the program. The **Rochester Firefighter Intern Program** provides hands-on training to participating East High School students using a variety of educational settings and community resources. The program's goal is to develop highly trained and motivated students eligible for hire as firefighters within six months of high school graduation. Intern Terrance Brown said about his experience, "Through this program, I learned how to be a leader and a follower, and I became very confident. It is really a good opportunity for me." As well as emphasizing community service, physical fitness, and health and safety, the program focuses on academic achievement in school and successful completion of state certification courses. Red Cross Health and Safety Instructor Kathy Cufari comments on the interest and enthusiasm of the student interns and says: "Their motivation is impressive. They work well together and really understand the importance of what they are doing." In early January, eight students passed the New York State fire fighters civil service test. Five have been hired by the Rochester Fire Department.

Design Element #2:

A Support Network for Students — Elementary, Middle and High School

Many students in Rochester are gaining knowledge and skills from experts in a variety of workplaces. Through Rochester's **Work-Site Mentor Program,** fifth- and sixth-graders at School No. 2 are paired with a professional in the business community from Eastman Kodak Company, Highland Hospital or the University of Rochester. These one-on-one mentoring relationships offer students a chance to see their mentor in the workplace using the skills that are being taught in the classroom. According to Program Coordinator Bob Babcock, a sixth-grade teacher at School No. 2, "Students have their mentors and teachers telling them about the same things, so their learning is reinforced." Students' self esteem and academic performance are often bolstered, as well, by the attention and extra help given them. Says Babcock, "The mentors become advocates for the children by asking them how they're doing in school and how things are going at home. That in itself is very valuable."

For Dorothy Pecoraro, Rochester City School District's Director of School-to-Work Transition, a student named Joseph sums up all that school to work aims to achieve. As a fourth-grader, Joseph did not do well in school and the prospect of speaking in front of a class terrified him. Now that he is in fifth grade, however, Joseph has taken part in the work-site mentor program at a University of

*Rochester's **student goals/outcomes:***

- *Critical and Creative Thinking*
- *Foundation Skills: Learning, Managing Change, and Communicating*
- *Knowledge of the Disciplines*
- *Problem Solving, Decision Making, and Planning*
- *Civil and Social Rights and Responsibilities*
- *Understanding and Valuing Diversity*
- *Successful Group Membership*
- *Personal Well-Being*

The Rochester City School District and the Rochester Business Education Alliance have declared that Rochester's students need to achieve the following ***applied learning or workplace competencies*** *to be successful workers:*

- *Communication*
- *Analysis: Problem Solving, Decision Making and Planning*
- *Teamwork*
- *Organizational and Customer Focus*
- *Commitment to Excellence*
- *Adaptability and Learning*
- *Personal Attributes (self-confidence, respect, honesty)*

Rochester's applied learning competencies, are aligned with New Standards' ***Framework for Applied Learning*** *which includes nine skill and knowledge strands:*

1) collecting, analyzing and organizing information;

2) communicating ideas and information;

3) planning and organizing resources;

4) working with others in teams;

5) using mathematical ideas and techniques;

6) solving problems;

7) using technology;

8) understanding and designing systems; and

9) learning and teaching on demand.

Rochester laboratory. One of his accomplishments so far: giving a speech to his class about a pioneer scientist in cell and DNA research. "He even carries his own business card," Pecoraro says proudly. The card reads: "Joseph James, Scientist in Training."

Mentors are also critical players in Rochester's Work-Scholarship Connection and Youth Apprenticeship programs. Students participating in both programs are assigned a work-site mentor to help them adjust to and succeed in the workplace. The mentor follows not only their progress on the job, but in the classroom as well.

Design Element #3:

Technical and Professional Training — High School & Postsecondary

Youth Apprenticeships

In order to execute the *America's Choice* recommendation to "create an education and training system where students can earn Technical and Professional Certificates," Rochester embarked on an effort to design and implement youth apprenticeships. The goal of youth apprenticeships is to educate and train young people based on high standards for lifelong learning — in school and out — and for broad occupational areas that are expected to be in demand in the future, command high wages and offer young people a career path.

In July 1993, five high school juniors helped launch Rochester's **Skilled Trades Youth Apprenticeship** program when they began working under the tutelage of skilled trades people at Eastman Kodak Company. Upon successful completion of the program, passage of Kodak's apprentice test, and graduation from high school, the students can expect to become Kodak apprentices with advanced credit in Kodak's Skilled Trades Apprentice Program. They will also become full-time employees with benefits, including health and tuition aid. In July 1994, five additional youth apprentices began work at Kodak. Two students have been separated from the program because they could not meet the criteria for participating. One student resigned to pursue another career interest.

Throughout their youth apprenticeship, the Edison Technical and Occupational Education Center students will log at least 1200 hours of training in four skilled trade areas: automatic equipment mechanic, electrical/instrumentation, pipe, and sheet metal. Youth apprentices rotate through these four areas learning and applying specific technical skills. The intent is to provide training with a focus on skilled trades as a career rather than target the training to any specific trade. When the students become actual Kodak apprentices, they will train in just one of the four skilled trades areas. Don Laniak, vice principal for vocational education at Edison, says, "The youth apprenticeship program provides students with a definite career path. We have never before been able to offer such a direct link to full-time employment for our students. The youth apprenticeship is quite an opportunity."

Youth apprentice Nikia Speed is working in the electrical/instrumentation trade with mentor Leslie Henckler of Kodak's Manufacturing Engineering & Maintenance Organization Division. She appreciates the hands-on approach of the program. "They give me the opportunity to participate rather than just watch," she says. Nikia has also discovered just how crucial the math and computer skills she is learning

back in the classroom are to success on the job. "I've been working with the programmable logic controller systems and have found there's a lot of math required for that," she says. "I also hadn't realized that you work with computers in this job."

Other industries within the Rochester community are getting involved in youth apprenticeships, as well. In August 1994, Rochester's **Health Care Youth Apprenticeship** program involving Rochester General Hospital, Strong Memorial Hospital and Franklin High School's Bioscience and Health Careers Academy began. Fourteen students are working and learning in seven health care occupational areas: respiratory care; laboratory; diagnostic radiology; nursing; patient and materials transport; EKG/cardiology and physical and occupational therapy. Technical and applied learning skill requirements, career opportunities and terminology have been articulated for each of these occupational areas in a workblock notebook.

For students who are successful, the program will: culminate in graduation from high school; give them at least three postsecondary credits from Monroe Community College through the Tech Prep program; offer them opportunities for hospital employment; and allow them to enroll full- or part-time in a postsecondary degree or certificate program.

Bausch & Lomb is taking the lead in developing a **Manufacturing Youth Apprenticeship** program. Students are expected to begin working in the Eyewear Division in September 1995. By that time, Rochester will have approximately 48 students in youth apprenticeships.

As a result of the successes in these programs, the Rochester Business Education Alliance is working with the Rochester City School District to develop a plan for scaling up and rolling out youth apprenticeship in additional companies and industries in Rochester.

Additional examples of Rochester's model school-to-work programs and activities are described in Appendix E.

PRELIMINARY RESULTS AND COSTS

Some results of school-to-work transition programs after preliminary study include:

- increased levels of student achievement;
- increased student attendance rates;
- students' acquisition of technical and workplace/applied learning skills;
- decrease in student discipline problems;
- increase in employee satisfaction and participation on the job; and
- quality employment opportunities for students in industries that demand highly skilled workers and offer high wage careers.

Costs vary from program to program, activity to activity. Costs range from a few hundred dollars per classroom to over $5,000 per student. At first glance the costs for programs like youth apprenticeship or Work-Scholarship seem high, but these costs are much less than the costs of retraining workers, incarcerating criminals or providing welfare.

HOW TO CREATE SUCCESSFUL MODELS

There are three strategies that Rochester is using to create successful school-to-work transition for its students: 1) involving employers as

To apply for youth apprenticeship programs, students must:

- *be 15 or 16 years of age;*
- *have two math credits, three or four credits in science, two credits in English, and two social studies credits;*
- *have at least a 2.0 grade point average in core academic subjects (math, science, English, social studies and technology);*
- *have 90 % attendance at time of application; and*
- *be at grade level.*

In addition, students' citizenship records are considered.

Involving and informing the public is critical to the success of any school reform effort. Because school-to-work transition requires the involvement of many internal and external publics, building awareness and engagement is key.

partners; 2) engaging all publics; and 3) providing staff development. All three strategies must be focused on helping students achieve the eight outcomes that Rochester defined as what students need to know and be able to do. (See sidebar on page 5.)

Design Element #4:
Employers as Partners

The District's Supervising Director of Workforce Preparation and Director of School-to-Work Transition Initiative work with the Rochester Business Education Alliance (RBEA) to obtain broad-based employer involvement in the School-to-Work Transition Initiative. Convened by the National Center in early 1992, the RBEA is an employer group committed, as a strategic partner with the school system and local government, to continuously improving the quality and cost effectiveness of education for students thereby improving the global competitiveness of employers and the community as a whole. The RBEA has three main areas of focus: standards and curriculum, school-to-work transition, and high performance management. (Appendix F).

The RBEA has worked intensively over the past three years to assist the District in defining student outcomes. An RBEA Task Force on Student Leaving Outcomes conducted an extensive research effort to compile information on what future workers will be required to know and be able to do. This information was incorporated into the District's eight student goals/outcomes. (See sidebar on page 5.) An RBEA Subteam on Standards and Outcomes is working to encourage employers and postsecondary education institutions to align their hiring and admissions criteria to these outcomes.

RBEA members participate and run many school-to-work transition model programs (described before and in Appendix E). These employers work closely with educators at every grade level to create school-to-work opportunities for all young people.

Fifty-seven high performance management or quality consultants from RBEA member companies are assisting 42 Rochester schools/sites in improving their management processes. Eastman Kodak Company's 21st Century Learning Challenge has engaged consultants to work closely with principals and school-based planning teams to improve school performance.

Design Element #5:
Public Awareness and Engagement

Involving and informing the public is critical to the success of any school reform effort. Because school-to-work transition requires the involvement of many internal and external publics, building awareness and engagement is key. Many constituencies make up the 'public,' such as students, parents, teachers, counselors, administrators, business/employer representatives, community representatives, local and state policy makers, and the media. Targeted messages need to be developed for and to specific audiences in order to build awareness and recruit people to become involved.

Rochester, through the work of one of its School-to-Work Transition Advisory Board Subteams, has created a public engagement strategic plan and has developed a number of products to help build awareness and involvement in school to work. These products include:

- a brochure that defines

Rochester's School-to-Work Transition Initiative, distributed to parents and teachers;

- a video that defines school-to-work activities and shows real kids in real programs;
- a video and brochures on Rochester's Youth Apprenticeship Program;
- a partnership guidebook that is a resource manual for educators, employers and community representatives on how to learn, work and succeed together;
- a brochure describing Rochester's Health Care Youth Apprenticeship Program; and
- a work-based learning resource manual that highlights materials used to implement school-to-work opportunities.

These products, as well as others under development, are examples of public awareness and engagement tools that any community can create and use. (A list of products/publications available for purchase is found at the end of this publication.)

Design Element #6:
Staff Development

Staff development is another key strategy to improving school-to-work transition in American schools. The purpose of staff development is to enhance understanding, awareness and application of subject matter expertise, applied learning/workplace competencies, process skills or instructional strategies. Rochester uses the following delivery methods for staff development to achieve the goals just described:

- in-service workshops, lectures or seminars;
- in-class support;
- teacher/worker exchange programs;
- job-site mentoring;
- sabbaticals;
- summer institutes;
- industrial/college research;
- tours;
- shadowing; and
- work-site auditing.

Through Rochester Area Career Education Council programs sponsored by the Industrial Management Council, Rochester City School District educators have had the opportunity to explore a variety of workplaces and jobs, thus helping them see firsthand what their students will need to know and be able to do to be successful workers and citizens. The Rochester Teaching Center is also developing staff development programs to assist educators and employer and community representatives in learning about and creating school-to-work transition opportunities for Rochester's youth and incorporating applied learning competencies into the curriculum.

ROLLING OUT SUCCESS: THE CHALLENGES ROCHESTER FACES MOVING FROM PILOT TO FULL-SCALE IMPLEMENTATION

Rochester has had much success in creating small-scale models or pilot programs. The major challenge it now faces is how to scale up and roll out these successes so that more students are affected and engaged and the system becomes institutionalized. Rochester needs large-scale, long-term changes. Rochester faces five major challenges:

Five major challenges Rochester faces include:

- *fund-raising and fund reallocation;*
- *community and employer support and involvement;*
- *coordination, integration and alignment of programs/efforts;*
- *increasing students' academic performance to meet high standards; and*
- *evaluating and assessing results of school-to-work programs and activities.*

Rochester would like to have all students participate in a work-based experience before they graduate. This means that employers and community organizations will need to provide more than 4,000 workplace opportunities for students annually.

• ***Fundraising and fund reallocation.*** Employers and educators must raise and spend money to create opportunities for students that will better prepare them for the future. City, county, school district and community funds must be invested in the programs and activities that educate and train Rochester's youth to be highly skilled, knowledgeable workers and citizens. Federal, state and local funds must be used collaboratively and aligned together to ensure that outcomes and goals are achieved. School-to-work transition efforts should not be seen as add-on programs. These efforts are a major component of education reform.

• ***Community and employer support and involvement.*** In order to dramatically increase the number of students involved in school-to-work transition programs and activities, Rochester must increase the number of community organizations and employers involved.

For example, Rochester would like to have all students participate in a work-based experience before they graduate. This means that employers and community organizations will need to provide more than 4,000 workplace opportunities for students annually. Recruiting small, medium and large-size companies to engage in programs like the Work-Scholarship Connection and the youth apprenticeship programs is one major task that the Rochester Business Education Alliance and the City School District is currently working on in implementing a roll-out strategy.

• ***Coordination, integration and alignment of programs and efforts.*** A system-wide approach must be embraced. Students who progress through the system need to be connected to programs that continue to build on the skills and knowledge they have already gained. Students with interest and skills in a particular career need to be guided to appropriate programs that will support the development of additional skills that will prepare them for a career in their field of choice and lifelong learning. Elementary, middle and high school teachers and administrators need to work closely together to integrate and link experiences for students. Each school has a School-to-Work Transition Leader or a Partnership Liaison. This person works with the Director of School-to-Work Transition, the school's principal and teachers to create opportunities for students, develop and maintain partnerships with employers and community agencies, and create linkages for students and schools. Employers will need to work closely with educators and postsecondary institutions.

• ***Increasing students' academic performance to meet high standards.*** In order to be prepared and qualified for participation in work-based learning opportunities, all students need to achieve at much higher levels in academic areas. Non-college bound and college bound students will be challenged to meet performance criteria (i.e., minimum 2.5 grade point average in core subjects). Employer representatives will need to motivate students to achieve the standards and will need to offer curricula and experiences in and out of school to help students learn skills and knowledge that prepare them for the future.

• ***Evaluating and assessing results of school-to-work programs and activities.*** School-to-work transition programs and activities should work

to achieve student outcomes and applied learning/workplace skills. Program leaders should set annual goals for performance and monitor progress against these goals. Progress should be described in quantitative and measurable ways. An annual report on the status of school-to-work transition in Rochester that includes data on student performance could highlight the success and progress made each year.

Successful programs should be expanded. Unsuccessful programs should be improved or eliminated. Information on lessons learned can be used to make improvements to programs that are not meeting annual goals.

STEP-BY-STEP RECOMMENDATIONS ON HOW TO IMPLEMENT A SCHOOL-TO-WORK TRANSITION SYSTEM

Recommendation #1:

Sponsor a community-wide effort to define what students need to know, be able to do and value.

Defining student outcomes and setting student performance standards is critical to implementing a successful school-to-work transition system. In Rochester, the District embarked on an effort — the Goals Initiative — to engage the broader community in the process of defining what students should know and be able to do at the same time it began focusing on improving school-to-work transition for its young people. This is exactly what needs to be done. A major participant in this effort is the business community. The Rochester Business Education Alliance, working in collaboration with the District, conducted an extensive research effort to gather information on what skills future workers need to possess. The Rochester City School District also participates in a county-wide effort (the Monroe County Educational Outcomes Project) and a national effort (New Standards) to define student performance standards. This information has been incorporated into the District's student goals/outcomes (see page 5). Students, educators, employers and community members all need to focus on these outcomes and standards. Incentives for employment and admission to higher education institutions must be tied to student achievement of these performance standards.

Recommendation #2:

Form a task force to focus on school-to-work transition.

A task force made up of representatives from a broad base of community constituencies should be formed to focus on school-to-work transition. The constituencies that should be represented include: educators at every level including postsecondary, employers, community, government and labor unions. The task force should conduct a brief assessment of the current status of school-to-work transition efforts for young people in the community. The task force should then create a vision, a strategic framework and a set of recommendations for how to proceed in implementing a school-to-work transition system. The task force should align its efforts with work being done to define what students should know and be able to do — an effort that can be going on simultaneously. The task force should support school-to-work transition

Step-by-Step Recommendations on How to Implement a School-to-Work Transition System

Recommendation #1:
Sponsor a community-wide effort to define what students need to know, be able to do and value.

Recommendation #2:
Form a task force to focus on school-to-work transition.

Recommendation #3:
Create a strategic framework for implementing school-to-work transition in your community.

Recommendation #4:
Appoint a director or manager of school-to-work transition.

Recommendation #5:
Create an advisory council or board and form implementation or work teams.

continued on page 12

continued from page 11

Step-by-Step Recommendations on How to Implement a School-to-Work Transition System

Recommendation #6:
Create an annual operating plan.

Recommendation #7:
Determine resource availability, reallocate existing funds and obtain additional funding if necessary.

Recommendation #8:
Solicit broad-based employer involvement by working with a key business/employer group already established in the community or by convening an employer group that will assist in education improvement efforts.

Recommendation #9:
Create evaluation and assessment tools that focus on measuring outcomes that students and school-to-work programs need to achieve.

Recommendation #10:
Engage a facilitator or intermediary entity with responsibility for connecting all school-to-work activities and programs to ensure that there is a unified strategy and effort to implement a school-to-work transition system.

programs and activities that achieve these student outcomes and standards.

The task force should also connect and align its work with efforts at the state level to implement a school-to-work transition system. States have received a grant from the federal government to support planning efforts. Eight states (Kentucky, Maine, Massachusetts, Michigan, New Jersey, New York, Oregon and Wisconsin) have received implementation grants to pioneer a nationwide movement to better prepare young people for college and careers.

Recommendation #3:

Create a strategic framework for implementing school-to-work transition in your community.

A strategic framework lays out in detail the mission, vision, key partners, areas or capabilities that must be developed; measures for monitoring achievement of defined goals; and strategies for implementing a school-to-work transition system. This strategic framework will assist key staff in completing annual operating plans and choosing priorities regarding implementation efforts. Rochester's School-to-Work Transition Strategic Framework is included in Appendix C as an example. This framework should be passed as policy by the Board of Education.

Recommendation #4:

Appoint a director or manager of school-to-work transition.

In order to accomplish the work that the task force lays out, you need a leader in the community to direct and manage the effort. This person should be well connected to all of the major constituencies and key players in the implementation process. In Rochester, the Rochester Board of Education appointed a Director of School-to-Work Transition to lead implementation efforts. A description of the roles and responsibilities of the director is included in Appendix G.

Recommendation #5:

Create an advisory council or board and form implementation or work teams.

Representatives from many different organizations in your community must work together to implement a school-to-work transition system. (For membership information, see Appendix H.) To engage many people in this effort, Rochester formed an advisory board consisting of seven working teams to do the work that was laid out in the strategic framework and the annual operating plan. The seven working teams are: career development, curriculum linking school and work, work-based learning, mentoring/support network for students, partnership development, staff development, and public engagement. Advisory board members serving on these teams have provided technical assistance, resources and expertise to the District in the effort to implement a school-to-work transition system.

Recommendation #6:

Create an annual operating plan.

One of the first tasks that the Director of School-To-Work Transition and the implementation or work teams should do is to create an annual operating plan or plans. This plan should grow out of the strategic framework. The components of an annual plan should include: a list of priority activities, projects or programs that you would like to implement; goals for each of these priorities; quantifiable measures to monitor achievement toward your goals; a timeline or due

BEST COPY AVAILABLE

date for completion; knowledge of who is responsible for implementing the priority program, project or activity; and a list of the resources needed to achieve your goals. A staff development plan should accompany these annual plans to ensure that everyone involved has the opportunity to obtain the skills and knowledge needed to carry out the work.

Recommendation #7:

Determine resource availability, reallocate existing funds, and obtain additional funding if necessary.

The federal *School to Work Opportunities Act* legislation allocates funding to support state and local efforts to implement school-to-work transition. Local communities can apply for grants directly from federal and state governments. In addition to the *School to Work Opportunities Act,* other federal support can come through the *Goals 2000 Act,* the *Job Training Partnership Act,* the *Carl Perkins Act,* and other vocational education legislation. To supplement funds that your school district and your city and county government should provide to support this effort, additional resources can also be raised within your local area through corporations, foundations and community organizations. Determining your resource needs is the first step. Working with existing funds by reallocating dollars is one strategy that you should pursue. Fundraising additional money by applying for public or private grants at local, state and national levels is another course to follow.

Recommendation #8:

Solicit broad-based employer involvement by working with a key business/employer group already established in the community or by convening an employer group that will assist in education improvement efforts.

In Rochester, leaders from local employers have long supported education reform. In 1992, the Rochester Business Education Alliance (RBEA) was formed to join together representatives from large, medium and small employers to focus and integrate their efforts to assist the Rochester City School District in improving student performance. The RBEA is focusing its work in three areas: standards, school-to-work transition, and high performance management. (Appendix F.) Employers must be equal partners in school-to-work transition programs and activities. Employers must work together and coordinate their efforts to offer work-based opportunities for students, career information, access to state-of-the-art training, information about what students should know and be able to do as future workers and incentives for students to achieve these standards, and opportunities for educators to learn about work and jobs in a particular industry or company.

Recommendation #9:

Create evaluation and assessment tools that focus on measuring outcomes that students and school-to-work programs need to achieve.

Evaluating and assessing student performance in school-to-work programs and activities is critical. It is very important that local communities focus on outcomes and have systems in place to measure whether students in school-to-work transition programs and activities are achieving the outcomes. Having proof and data on the achievement of applied learning/workplace skills, academic skills and work-based or technical skills will assist all

Evaluating and assessing student performance in school-to-work programs and activities is critical. It is very important that local communities focus on outcomes and have systems in place to measure whether students in school-to-work transition programs and activities are achieving the outcomes.

To ensure that all school-to-work transition efforts are aligned and connected within a community it is essential that a third-party facilitator or intermediary entity exists to coordinate and manage this task. Possible options include non-profit organizations, government agencies or employer associations.

key players in planning and implementing a school-to-work transition system. Key measures should look at the 'opportunity for experiences' as well as the 'quality of experience.' Rochester, in its strategic framework for school-to-work transition, identified a number of key measures such as the number of teachers and students using redesigned curriculum that better connects school and work; the percentage of students who graduate who achieve the student outcomes that the District, employers and the community have set; and the number of students participating in youth apprenticeship programs. (Appendix C.) Setting concrete, measurable and observable goals or targets for each of these measures will help drive implementation efforts. Reporting out on these measures will inform the public and all key partners about their progress.

Recommendation #10:

Engage a facilitator or intermediary entity with responsibility for connecting all school-to-work activities and programs to ensure that there is a unified strategy and effort to implement a school-to-work transition system.

To ensure that all school-to-work transition efforts are aligned and connected within a community, it is essential that a third-party facilitator or intermediary entity exists to coordinate and manage this task. Possible options include non-profit organizations, government agencies, or employer associations. In Rochester, the National Center on Education and the Economy has provided technical assistance and expertise in the creation of a school-to-work transition system in the Rochester area. The National Center's Rochester Program has analyzed and developed policy, proposed radical changes that will redesign the entire education and training system to greatly improve student performance and create a better school-to-work transition system, and assisted in the creation and implementation of model programs. The National Center has conducted extensive research and benchmarked with others across the country and abroad to bring best practice into the area. It has also recommended that representatives from a broad range of constituencies (educators, employers, postsecondary institutions, organized labor, government, parents, etc.) be engaged and involved in implementation efforts, and it has facilitated employer and education relationships to ensure that school and business/industry efforts are well connected and all focus on achieving the same outcomes.

CONCLUSION

Passage of the *School to Work Opportunities Act* encourages systemic changes that are needed at the local, state and national level to better prepare youth to transition from school to work. It is up to each community to embark on the task of making this happen for people in their locale. Rochester has taken a lead in doing so. Serving as a model for others, Rochester's experience can aid other communities as they begin to implement a school-to-work transition system. By no means is Rochester's work complete, but what has been done so far can serve as valuable information and experience to enlighten anyone just beginning or working on this endeavor.

ENDNOTES

[1] *America's Choice: high skills or low wages!* National Center on Education and the Economy, June 1990.

[2] *High Expectations: What Rochester Students Should Know and Be Able to Do,* National Center on Education and the Economy, October 1990.

[3] *The Forgotten Half: Pathways to Success for America's Youth and Young Families*, William T. Grant Foundation, November 1988.

[4] *Workforce 2000: Work and Workers for the 21st Century*, The Hudson Institute, 1987.

[5] New Standards is jointly run by the National Center on Education and the Economy and the Learning Research and Development Center at the University of Pittsburgh. Partners are the states of Arkansas, California, Colorado, Connecticut, Delaware, Florida, Iowa, Kentucky, Maine, Massachusetts, Missouri, New York, Oregon, Pennsylvania, South Carolina, Texas, Vermont, and Washington, and the school districts in Fort Worth (TX), New York City, Pittsburgh, Rochester (NY), San Diego and White Plains (NY). These partners collectively teach more than half of the public school students in the United States.

[6] The National Alliance for Restructuring Education, a National Center on Education and the Economy program, is a unique partnership of states, school districts, corporations, foundations and not-for-profit organizations working together on systemic changes that will produce much higher levels of learning for all children. The Alliance focuses on five design tasks: standards and assessment; learning environments (curriculum and instruction, school-to-work and instructional technology); community supports and services; high performance management; and public engagement.

APPENDICES

APPENDIX A

Organizations Serving on Rochester's School-to-Work Transition Task Force

Employers

AC Rochester
Eastman Kodak Company
Greater Rochester Chamber of Commerce
Industrial Management Council
Private Industry Council
Rochester General Hospital
Wegmans Food Markets, Inc.
Xerox Corporation

Education

Monroe County School Board Association
Monroe #1 Board of Cooperative Extension Services
Rochester City School District
Rochester District Parent Council
Rochester School and Business Alliance
Rochester Teachers Association
Wayne-Finger Lakes Board of Cooperative Extension Services

Postsecondary Education

Monroe Community College

Government

City of Rochester
New York State Department of Labor

Community

Career Development Services
IBERO-American Action League, Inc.
National Center on Education and the Economy
Rochester Brainpower
Rochester Jobs, Inc.
Urban League

Labor/Unions

Rochester Tooling & Machine Institute
United Auto Workers

Rochester City School District

Workforce Preparation

ROCHESTER BOARD OF EDUCATION
POLICY STATEMENT
SCHOOL-TO-WORK TRANSITION INITIATIVE

The Rochester School-To-Work Transition Initiative is a systematic approach to prepare all youth for future work, education and life. It is a bridge for moving young people to higher levels of academic and work standards by developing the skills necessary for success in the workplace, post secondary education and professional/technical training, and for lifelong learning. This workforce preparation initiative for our youth and community is based on high standards and bringing school and work together in the classroom and community. The School-To-Work Transition Initiative prepares youth to identify a career direction while in high school and begin to pursue the additional education and technical training required for success in that career.

POLICY

Context and Purpose

Acknowledging the importance of linking school and work to fully developing a student's potential, this Board policy is designed to improve all students' transition from school into the workplace and to further education and training. To provide students with a more relevant learning experience that is linked to the world of work, the Board expects all students regardless of socio-economic status or career choice, to master academic and work standards that are benchmarked to the highest in the world. The School-To-Work Transition Initiative is an essential element of the district's strategic plan (mission and vision) and its values policy. The School-To-Work Transition Initiative, by infusing its concepts and activities* into the total school program, is an integral part of creating a system that allows youth to be the best in the world. Essential to its success are system-wide change, interdisciplinary collaboration, infusion of school to work concepts, communication and recognition of the value of work as part of the educational process. Classroom practice pre-K to adult will reflect these conceptual changes and employers have a new and unique role to play.

This policy is a direct outgrowth of the Board of Education's strategy to share district responsibility for helping all young people meet new performance levels. In addition to district personnel, the Board requires the support and involvement of parents, higher education representatives, employers and a cross section of the community to better prepare youth to become productive, contributing members of society and to demonstrate to young people the relationship between the worlds of school, family and work.

*Some examples include: critical and creative thinking, problem solving, decision-making, planning, managing change, teamwork, continuous improvement, effective communication and quality work. These competencies are included in the eight goals of the Goals, Outcomes, Measures and Standards Initiative.

131 West Broad Street • Rochester, New York 14614 • (716) 262-8327 • Fax# (716) 262-8330

All of these partners are important. However, without the buy-in and participation of the employer community, Rochester's School-To-Work Transition Initiative cannot proceed successfully. Hence, this policy requires district personnel to make it a priority to work collaboratively with the business community. In addition, the success of this initiative hinges on the commitment of teachers and administrators, staff development and inservice programs.

The School-To-Work Transition Initiative is designed to:

- prepare young people to choose the education and training required for various careers;
- provide all young people with the necessary tools to pursue meaningful careers and to enter the labor market;
- create links, where they do not already exist, to concrete career options;
- establish clear career routes - including work, technical training and two or four year college - that do not close off other educational or training options;
- develop training and job opportunities where they do not currently exist;
- require collaboration with community members to carry the changes forward.

The key features of the system are as follows:

1. a pre-K to adult curriculum that develops academic and work skills based on standards defined by schools and industry;
2. consistent delivery of career development information;
3. structured work-based experiences that provide all youth with career information, work skills and technical skills;
4. a coordinated support network that is linked to schools and relies on parents, mentors, employers, youth advocates and social service agencies to assist youth;
5. choice of a direction in which youth would like to take their education by tenth grade;
6. the development of industry or trade focused technical training that is linked to careers and the labor market for all eleventh and twelfth graders choosing this educational path.

POLICY MONITORING AND EVALUATION

Several different constituencies will be involved in policy monitoring and evaluation. The monitoring and evaluation framework will be reviewed by the Superintendent and appropriate district staff, Board's Curriculum Development Committee and the School-To-Work Transition Advisory Board. After determining the criteria that will be used for evaluation, the project manager, through the Superintendent of Schools, will prepare and present to the Board of Education an annual formal progress report on implementation. The Office of Parent and Community Involvement and the Public Relations Office will be responsible for updating - at six month intervals - parents, business and the community on the progress of the initiative; the Association of Supervisors and Administrators of Rochester (ASAR) will be responsible for updating administrators and supervisors and the Rochester Teachers' Association (RTA) will be responsible for updating teachers and Board of Education Non-Teaching Employees (BENTE) will be responsible for updating support services personnel.

ROCHESTER BOARD OF EDUCATION
ADMINISTRATIVE REGULATIONS
SCHOOL-TO-WORK TRANSITION INITIATIVE

ORGANIZATION:

The School-To-Work Transition Initiative does not require a different structure within the district; by building on and enhancing what currently exists in the district and the community and filling gaps in delivery, over time the School-To-Work Transition Initiative creates a comprehensive transition system out of a myriad of programs and partnerships that had been running on parallel tracks. The School-To-Work Transition Initiative hinges upon new working relationships, modes of delivering education (including gaining critical input and approval from parents), which will require district personnel to work, teach and develop curriculum and standards differently.

This School-To-Work Transition Initiative links back to, furthers and relies on the strategic initiatives that are already underway in the district. These include: decentralization (school-based planning, teacher empowerment); Performance Appraisal Redesign for Teachers (PART); home-based guidance; and the district's multiculturalism, parent involvement, interdisciplinary and Goals, Outcomes, Measures and Standards, and Values Initiatives.

While necessarily interrelated, the district must perform separate work on each of these initiatives in order to bring its goals to fruition.

AUTHORITY AND RESPONSIBILITY:

Implementation of this School-To-Work Transition Initiative will be comprehensive in nature. The Department of Workforce Preparation is responsible for overseeing, managing and coordinating the implementation effort. The Department of Work Force Preparation along with the project manager, with Superintendent and Board approval will coordinate the implementation effort, bringing in outside resources where necessary and working closely with key staff on integrating the School-To-Work Transition with other district initiatives. Other departments have committed support for this effort by donating staff to participate on the Task Force and develop this initiative. The Rochester Teachers' Association has also designated a representative to work on the effort and has maintained a strong working relationship with The National Center on Education and the Economy and other district staff. The National Center will continue to provide support and work with the district and the employer community through the Rochester Business Education Alliance (RBEA) on implementing this initiative. This support will include working with the district's project manager, providing implementation advice and direction. Any changes in current policy that are required by the changes wrought by the School-To-Work Transition Initiative require approval by the Superintendent and the Board of Education.

131 West Broad Street • Rochester, New York 14614 • (716) 262-8527 • Fax# (716) 262-8330

FOCUS OF PLANNING:

Staff working on the School-To-Work Transition Initiative will undertake a ten year plan to implement this initiative in a timely yet systematic fashion. Implementation of the plan corresponds to completing the action steps laid out in the School-To-Work Transition Initiative proposal that was presented to the Board on October 28, 1991. At various intervals, the plan may have to be modified, the timeframe readjusted and resources realigned.

The plan includes the following:

1. Define preliminary framework and approach (completed March, 1991)
2. Form Task Force to develop proposal for Board of Education (March, 1991)
3. Develop proposal and present to Board (work completed October, 1991)
4. Present to Rochester City School District Strategic Review Committee (January, 1992)
5. Present to employer community (completed November, 1991; received initial buy in from Rochester Business Education Alliance)
6. Develop and approve Board policy statement (January, 1993)
7. Implement initiative (already begun - July, 1992))

Rochester City School District

Workforce Preparation

ROCHESTER BOARD OF EDUCATION
IMPLEMENTATION STEPS
SCHOOL-TO-WORK TRANSITION INITIATIVE

° Redefine the pre-K to adult curriculum to link school and work, include a career awareness focus and develop work readiness skills to enable all youth to choose an education direction by tenth grade:

Form teams to develop strategies for:

- bringing together business and Rochester City School District to work on the Goals, Outcomes, Measures and Standards Initiative;
- providing career development information to all pre K - adult students;
- creating and field testing performance based assessments;
- training all RCSD teachers in the entire School-To-Work Transition concept;
- developing an orientation program for other school personnel and parents;
- developing an incentive system to reinforce educators, employers and students' actions;
- developing a process to assure that all students have work experiences
- recruiting business, labor and local educational institutions to jointly plan work-based experiences, technical training and jobs for students.

° To involve employers as partners in the total educational process:

- define outcome standards as part of the Goals, Outcomes, Measures and Standards Initiative;
- develop partnerships with the business community, the district, higher education and the public sector;
- create opportunities for educators and employers to learn about each others' work environments;
- develop a process for streamlining partnerships;
- create a record for employers and postsecondary institutions to use to document students' educational attainment and work experiences.

° To provide a coordinated support system with parents and community as partners and have it available to every student who needs it:

Form teams to develop strategies for:

- assuring appropriate connections between schools, social service agencies, community organizations, students and their families;
- developing and evaluating mentoring programs/approaches;
- training those working with youth;
- working with RCSD's parent council to increase access to schools and involvement in the School-To-Work Transition Initiative.

131 West Broad Street • Rochester, New York 14614 • (716) 262-8327 • Fax# (716) 262-8330

° To establish technical training and youth apprenticeships starting in the eleventh grade that lead to meaningful career opportunities:

Form teams to develop strategies for:

- connecting existing and new secondary and postsecondary education and training programs (youth apprenticeship and tech prep) to the School-To-Work Transition Initiative;
- defining labor market demand to determine the type and number of training programs;
- developing training programs;
- linking with other districts and postsecondary institutions.

° To internalize the School-To-Work Transition Initiative within both the district and the community:

- empower the project manager to coordinate the initiative, determine resource needs, obtain funding, form an overall implementation team and create an advisory council for the initiative;
- develop an approach to assess progress of implementation;
- implement a communication plan.

SCHOOL-TO-WORK TRANSITION STRATEGIC FRAMEWORK

1993 — 1996

Vision

"The school-to-work system is a success because it focuses on me and my community. The nation recognizes that I have academic and work skills that are world class. I have gained these skills through an academically and vocationally integrated curriculum that has engendered in me high esteem, self-worth, self-empowerment and a motivation to continue learning throughout my life. It has equipped me with tools to make informed life choices.

My teachers have the latest knowledge and flexibility to deliver quality instruction and curriculum. The curriculum and educational process is understood and supported by all stakeholders — employers, labor, government, educators, community organizations, parents and students. Extensive collaboration among the stakeholders has created innovative approaches to meet my and the community's needs. Employers recruit and hire recent high school graduates like me from the community. Participating stakeholders share a sense of collective responsibility and pride for my success and the community's prosperity."

Mission

To implement a continuously evolving School-to-Work Transition preK through adult system that embodies what a student should know, value, should be able to do and connects with the changing needs and expectations of the Rochester employer community and the community at large.

Primary Partners

- Community and Governmental Agencies
- Educators
- National Center on Education and the Economy
- Parents
- Postsecondary Institutions
- Rochester Business Education Alliance Employer
- School-based Planning Teams
- Students
- STWT Advisory Board

Dorothy R. Pecoraro
Director, School-to-Work Transition Initiative
Rochester City School District
131 West Broad Street
Rochester, NY 14614
716-262-8389

© Rochester City School District and the National Center on Education and the Economy, 4/94

ROCHESTER CITY SCHOOL DISTRICT

SCHOOL-TO-WORK TRANSITION STRATEGIC FRAMEWORK

Key Result Areas	Measures	Strategies	Activities 1/94-12/95
Curriculum Linking School and Work *Adapt preK-12 curriculum to include consistent career development information, and applied learning competencies, and develop standards defined by educators, employers, and the community.*	• Number of teachers using redesigned curriculum • Number of students participating in career development • Percent of students who graduate meeting GOMS outcomes • Number of students engaged in structured work experiences • Percent of work experiences utilizing the applied learning competencies evaluation tool	• Work with Departments of Curriculum Development and Support and Guidance to integrate applied learning competencies, career development information and work experiences into the curriculum • Work with employers to develop structured work experiences, for all students in grades 8-12, that emphasize the application of applied learning competencies and outcomes	• Assist teachers in creating performance tasks that incorporate applied learning skills at all grade levels • Expand Junior Achievement curriculum grades K-12 • Expand School Is Work program to all CAS • Develop relationship with employers to provide additional structured work experiences • Determine efficacy of using the Career Planning Guide with 9th grade students
Technical and Professional Training *Develop industry, broad occupational, or trade-focused technical and professional training that is linked to careers and the labor market for a targeted number of 11th and 12th graders.*	• Number of Tech Prep and youth apprenticeship opportunities available to students • Number of students participating in Tech Prep and youth apprenticeships	• Expand Tech Prep and youth apprenticeship opportunities for 11-12 grade students • Secure commitment from employers, industry and labor to develop and deliver these programs • Secure commitment from post-secondary education providers to deliver related technical instruction and award postsecondary credit for these programs	• Form industry groups to develop specific training programs • Assist in implementing health care youth apprenticeship program at RGH and SMH for 14 students, and foster the expansion of the program • Support the expansion of the skilled trades youth apprenticeship program • Assist in creating a manufacturing youth apprenticeship program • Assist in developing a rollout strategy for youth apprenticeships and Tech Prep
Partnership Development *Create partnerships designed to enrich learning and enhance instruction, improve students' transition from school to work, and establish support services/networks for students.*	• Number of new and existing partnerships that focus on STWT and applied learning outcomes • Number of students involved in partnership activities as defined by the STWT matrix • Number of internal and external constituencies who understand, are involved in and support STWT	• Develop long-term school/ teacher/ employer/community partnerships to provide key resources: tutors and mentors; instructional support and enrichment; curriculum development; structured work experiences; incentives for student achievement; and staff development • Work with the RBEA to obtain broad-based employer involvement in STWT	• Disseminate partnership guidebook to teachers, administrators and employers • Provide orientation and training for those interested in forming partnerships • Establish relationships with new partners and maintain existing ones • Expand partnership management process to all CAS • Link STWT activities to the development of applied learning skills • Work with partnership liaison in each school

© Rochester City School District and the National Center on Education and the Economy, 4/94

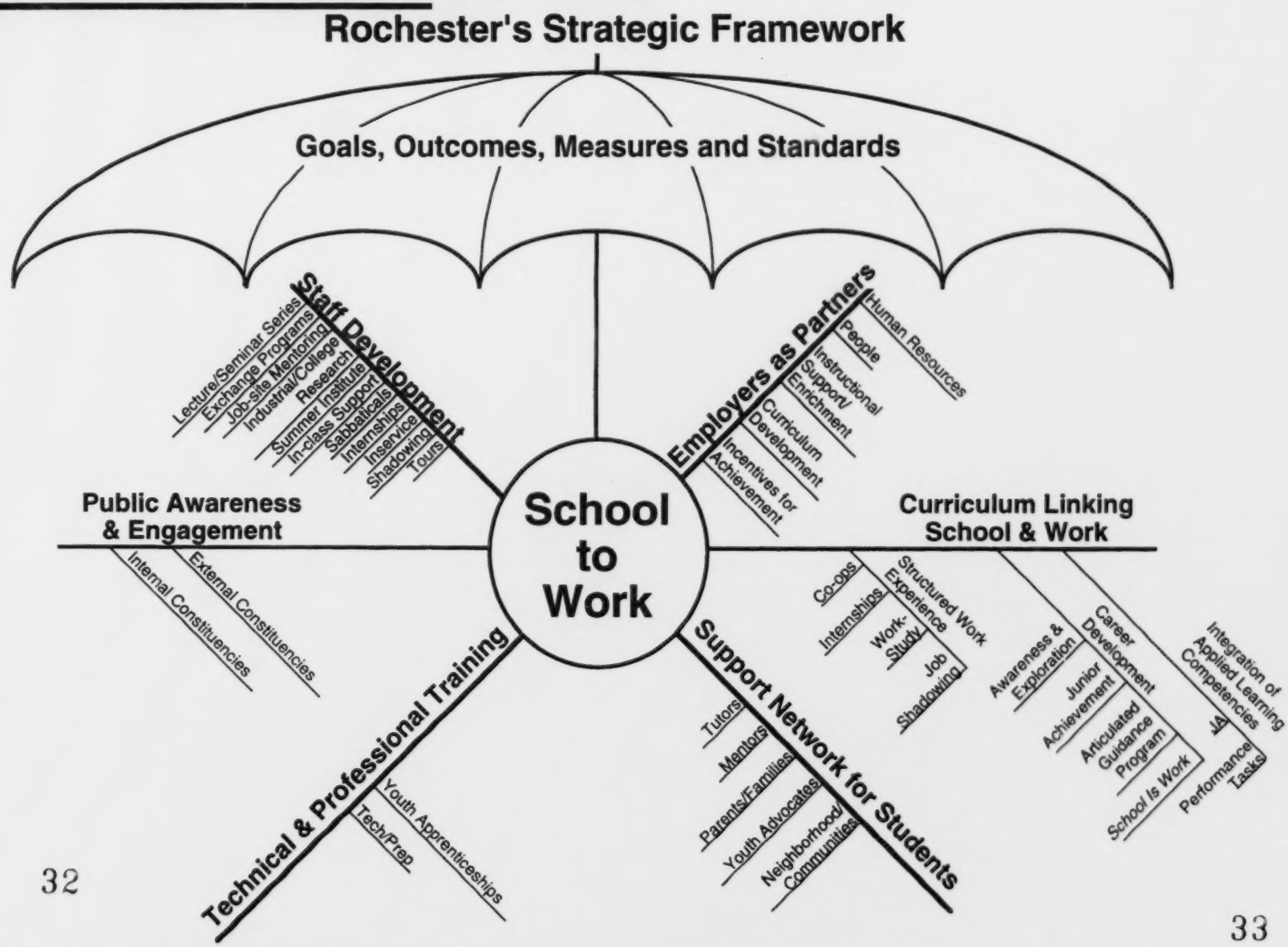
ROCHESTER CITY SCHOOL DISTRICT

SCHOOL-TO-WORK TRANSITION STRATEGIC FRAMEWORK

Key Result Areas	Measures	Strategies	Activities 1/94-12/95
Public Awareness and Engagement *Develop internal and external publics' understanding of, support for and involvement in STWT activities.*	• Number of people in internal and external constituencies who understand, are involved in and support STWT	• Raise awareness and support for STWT among internal and external constituencies • Deliver orientation sessions and workshops on what STWT is and how these publics can become involved • Build relationship with media • Develop media products to convey STWT message	• Provide orientation sessions and workshops • Contribute updates in District, RTA, BENTE, and ASAR newsletters highlighting STWT activities • Use public information office to inform the public about STWT activities • Work with the STWT liaison at each CAS school site
Staff Development *Educate school and worksite personnel about the scope and sequence of STWT and provide them with implementation techniques, knowledge and skills.*	• Number of teachers and administrators understanding GOMS outcomes, especially those focused on applied learning • Number of teachers and administrators using new instructional strategies and assessments • Number of employers understanding GOMS outcomes, especially those focused on applied learning • Number of employers integrating applied learning into work-based experiences • Number of educators, employers and employees participating in STWT staff development	• Work with the Department of Curriculum Development and Support to train teachers and administrators to develop and use performance tasks that integrate applied learning competencies and the GOMS outcomes into the curriculum • Arrange external experiences for and provide external resources to teachers and administrators so they can become aware of and gain expertise in applied learning skills and working environments • Work with the Department of Guidance to provide staff development programs to enlist counselor support and involvement in STWT activities	• Create workplace opportunities and experiences for teachers and administrators • Engage the RBEA in assisting the District in developing performance tasks that integrate applied learning competencies into the curriculum • Provide orientations and workshops for teachers, administrators, guidance counselors, paraprofessionals and support staff on STWT • Develop in conjunction with the Rochester Teacher Center inservice programs, i.e., STWT activities, partnership development, career development information, etc.
Support Network *Build a cadre of people committed to providing social, emotional and academic support to students so that the students accomplish their educational goals.*	• Number of students who have mentors, tutors and youth advocates • Percent of students graduating • Number of adults providing support • Percent of students on grade level	• Provide mentors and tutors to students preK-adult • Increase the number of youth advocates that support middle and high school students • Involve parents, family members and school personnel in students' decision-making about education and career choices • Encourage worksite partners to identify a mentor for every student participating in a structured work experiences • Establish an open communication network among family, school and worksite for students in structured work experiences	• Develop guidebook for mentors and tutors, and disseminate it • Provide orientation and training to mentors and tutors • Gain commitment from the employer community to sponsor students and youth advocates • Educate Youth Advocates about STWT opportunities for students • Identify and work with new sources of mentors and tutors

© Rochester City School District and the National Center on Education and the Economy, 4/94

School-to-Work Transition

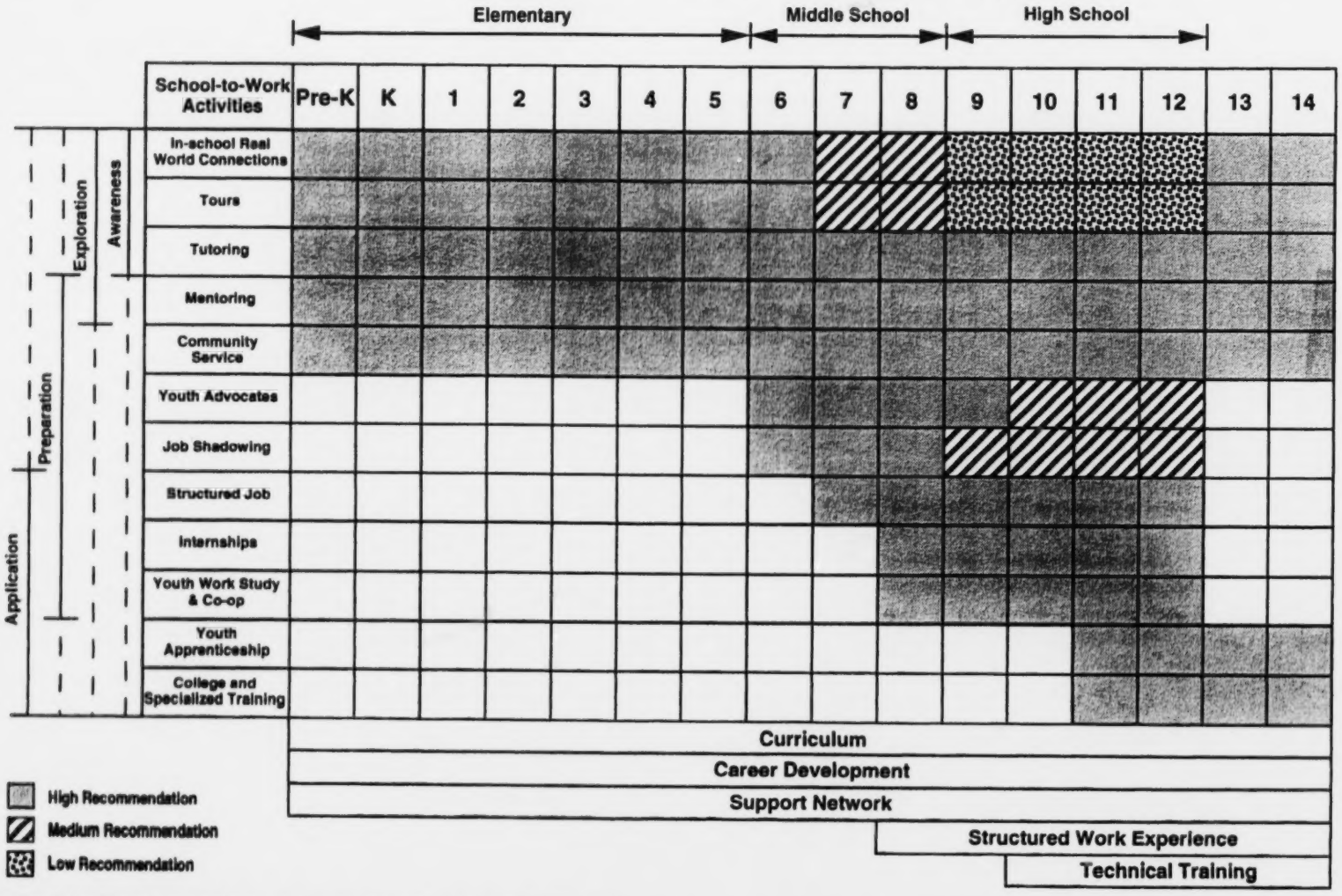


© Rochester City School District and the National Center on Education and the Economy, 1994

BEST COPY AVAILABLE

School-to-Work Transition

School-to-Work Transition Activities



© Rochester City School District and the National Center on Education and the Economy, 1994

Definition of School-to-Work Transition Activities

In-school Real World Connections:	**In support of a student's career awareness, career exploration, personal planning and personal development, representatives from employers/community agencies may participate in developing skills, acting as role models, visiting classes, demonstrating projects, organizing hands-on projects, conducting lectures, and providing explanations of equipment design and use.**
Tours:	**Structured and meaningful visits to worksites to observe the workplace and workplace skills in action.**
Tutoring:	**Specific help on academic skills.**
Mentoring:	**A trusted coach, guide, confidant, either in or outside of the workplace, who, over a period of time, supports the student in mastering systems, processes, behaviors and skills.**
Community Service:	**Unpaid or volunteer experience for students to: build understanding of the public sector, non-profit organizations or community agencies; contribute their skills to community service; and develop the skills, behaviors and values required by community service organizations.**
Youth Advocates:	**A full-time professional adopts 25 to 30 middle school students and works with them intensively for four to five years to help students become successful as students, employees and citizens. The advocate focuses the resources of family, school, worksite, health, church and community for students.**
Job "Shadowing":	**A student spends time during the workday with an expert of a certain trade, craft or profession, observing the expert's application of specific worksite behaviors and skills.**
Structured Job:	**A part-time, paid, structured work experience that is designed to enhance a young person's understanding of the worksite, worksite skills and behaviors, and the links between school and work. Helping the student is a mentor who supports the student in mastering systems, processes, behaviors and skills.**
Internship:	**As part of a worksite learning experience of several weeks or months, a student works on a specific task or project in order to become familiar with the worksite, worksite skills and behaviors and their application to academics (or vice versa).**
Youth Work Study and Co-op:	**Paid work experience related to students' course of study for credit where students learn and perform occupational skills on the job.**
Youth Apprenticeship:	**A strategy that combines supervised, structured on-the-job training in a bonafide and documented employment setting with related theoretical instruction. It is sponsored by employers and labor management groups that have the ability to hire and train. This education and training strategy leads to the youth apprentice's high school graduation and counts toward advancement in an apprenticeship program and/or a post-secondary certificate or associate's degree program.**
College and Specialized Training:	**Post-secondary courses of study and training necessary to pursue a particular career path.**

© Rochester City School District and the National Center on Education and the Economy, 1994

APPENDIX E

Examples of Rochester's Model School-to-Work Programs and Activities

Curriculum Linking School and Work — Elementary School

Junior Achievement

Volunteers from the business community visit the classroom and lead activities with training and materials provided by Junior Achievement geared to specific grade levels. Through hands-on activities, Junior Achievement helps students learn and understand their place in the economy, see the relevance of education to their future, and explore career opportunities. For example, elementary students might make donuts by both mass and unit production to learn about the American free enterprise system.

Performance Tasks

The Rochester City School District is a member of New Standards, a new system of standards and assessments that are the cornerstone of a strategy to greatly improve the performance of *all* students. Performance tasks help educators gauge student progress. Tasks are designed to emphasize the ability to think well, to demonstrate a real understanding of subjects studied, and to apply what one knows to the kind of complex problems encountered in life.

School Is Work

The School Is Work program looks at school as a workplace. Students are learners and workers. In the process of learning, work tasks are performed involving data, people and things. Teachers are taught to view the school as a work environment and, in doing so, to make students aware of the worker functions and traits that are used and are necessary in the world of work.

Talents Unlimited

Developed in 1971 by the Division of Curriculum and Instruction for the Mobile County Public School in Mobile, Alabama, Talents Unlimited is a program designed to help teachers recognize and nurture in all children multiple talents. These include productive thinking, forecasting, communication, decision-making and planning as well as academic talents.

Curriculum Linking School and Work — Middle School

Career Development Plans

Intended primarily for use by guidance counselors, the activities in Rochester's Articulated Career Guidance program center on self-awareness, values clarification and career awareness. The emphasis for sixth-graders is on self awareness and good social skills. The emphasis of the seventh-grade program is awareness of self, school, values and careers. For eighth-graders, self-awareness and career awareness come together to impact choices regarding high school. Many of the activities provide first-time exposure to the ideas of sex stereotyping and the value of work.

The Rochester Work-Scholarship Connection

Developed by Wegmans Food Markets, Inc. to combat the high dropout rate of Rochester City School District students, the Work-Scholarship Connection offers jobs, scholarships, adult support and workplace know-how to at-risk Rochester City School District middle and high school students as incentives to stay in school and perform at a satisfactory level.

The skills learned on the job enable young people to see the relevance of their success in school with success on the job. The program's web of support includes a youth advocate, school sponsor, tutor and job-site mentor. Often referred to as the young person's champion, the youth advocate is responsible for coordinating all of the resources that are available to students participating in the program. The youth advocate is a full-time professional who works with up to 30 students, tracking their academic, workplace and, when appropriate, social progress.

Real World Connections

Forty-eight eighth-graders from Douglass Middle School are learning how to develop and market a product through the school's partnership with Sentry Group — a company that makes fireproof safes. In their technology class, the students are divided into three groups, each a working company, and are provided with materials, tools, machines and computers. Once a week, a Sentry Group representative visits the class for two hours to assist in the various stages of product development and design, production, marketing, sales, etc.

"The Power of Kids" — Jefferson Middle School/Center at High Falls Docent-Training Program

Through Jefferson Middle School's partnership with the historic Center at High Falls, 24 eighth-grade students are not just learning local history, they are learning how to teach it to others. Classroom learning includes research, writing, editing, speaking and listening. One day a week, the students apply those skills at the Center, where they work with a variety of professionals, including museum docents and the city historian.

Curriculum Linking School and Work — High School Level

Firefighter Intern Program

The Rochester Fire Department, in cooperation with City government and the school district, offers a two-year, 2,200-hour job training and work experience program. The Rochester Firefighter Intern Program provides hands-on training to participating East High School students using a variety of education settings and community resources. Its goal is to develop highly trained and motivated students eligible for hire as firefighters within six months of high school graduation. As well as emphasizing community service, physical fitness, and health and safety, the program focuses on academic achievement in school and successful completion of state certification courses.

Rochester Gas & Electric's Co-op Plus Program

Rochester Gas & Electric's program consists of career awareness, which includes tours, on-site demonstrations and career-day presentations for both students and faculty; job shadowing; co-op work experiences; and mentoring. Students can be found working at the drafting tables, on meters, on sheet metal and duct work, and in the field assisting electric line and gas maintenance crews. If they successfully graduate from the program, students can enter gas trouble-shooting repair, and construction or linemen jobs.

Franklin High School's Bioscience and Health Careers Academy

Franklin's Bioscience and Health Careers Academy promotes an awareness of health career opportunities among students from the eighth grade through 12th grade, increases support services for students who are educationally disadvantaged, and inspires students to look beyond high school to all available options, such as postsecondary education.

In addition, Rochester General and Strong Memorial hospitals offer Franklin students mentors, field study opportunities, tours, job shadowing opportunities, co-op employment and youth apprenticeships. In the youth apprenticeship program, students work and train with health-care professionals at the hospitals over two academic years and, upon successful completion of the program, will enter employment at the hospital and/or postsecondary education.

Kodak/Edison Tech Students Build-a-School Project

A Montessori preschool serving more than 70 youngsters stands on Orchard Street, thanks to a partnership between Eastman Kodak Company and Edison Technical and Occupational Education Center. The two preschool classrooms, which adjoin School No. 17, were built by Edison Tech students, their teachers and Kodak tradespeople.

Kodak underwrote the project as part of its 21st Century Learning Challenge. More than 15 other local businesses contributed materials. The construction project lasted through the 1992-93 school year, providing students with a long-term opportunity to apply the knowledge they had been learning in the classroom.

Support Network for Students — Elementary, Middle & High School

'Back to Basics' Tutoring Program

During July 1993, 20 Rochester Tel employees volunteered their time to coach Jefferson Middle School students in a summer tutoring program. Coined "Back to Basics," the program taught students approaching the seventh- and eighth-grade basic math skills — primarily multiplication and division. Working with the math lab coordinator at Jefferson, the company organized the tutoring program, which met three days a week for two hours over the course of two weeks.

The 21st Century Learning Challenge

The Eastman Kodak 21st Century Learning Challenge is a 10-year commitment to schools in Kodak manufacturing site communities nationwide, including Rochester. Its goal is to help students reach world-class performance levels in math, science and technology. The program targets students in grades pre K-12,

provides instructional and leadership excellence for teachers and administrators, and supports school leadership in creating high performance school systems.

Mentors and volunteers in the classroom help students see how math and science are used in the real world. In-class participation brings volunteers into the school to show, for example, how ordering from a menu can be a math lesson.

Work-Site Mentor Program

Fifth- and sixth-graders at School No. 2 are paired with a professional from the business community, such as Eastman Kodak Company or the University of Rochester. These one-on-one mentoring relationships offer students a chance to see their mentor in the workplace using the skills that are being taught in the classroom. Students' self esteem and academic performance are often bolstered, as well, by the attention and extra help given them.

Mentors are also critical players in Rochester Work-Scholarship Connection and youth apprenticeship programs. Students participating in both programs are assigned a worksite mentor to help them adjust to and succeed in the workplace. The mentor follows not only their progress on the job, but in the classroom as well.

Family Math Program

The Family Math program is a national program that uses a tutorial method to help elementary school children and their parents with math skills. The program is run during after-school hours at schools by District educators who work not only with child but with parent. The goal is to reinforce student math skills, as well as parental support. The tutoring is correlated to District curriculum.

Technical and Professional Training — High School & Postsecondary

Youth Apprenticeships

The goal of youth apprenticeship is to educate and train young people based on high standards for lifelong learning — in school and out — and for broad occupational areas that are expected to be in demand in the future, command high wages and offer young people a career path. Students must log at least 1200 hours on the job over two academic years to receive their certificate of completion.

The Skilled Trades Youth Apprenticeship program began at Eastman Kodak Company in July 1993. Successful students can expect to become Kodak apprentices with advanced credit in Kodak's skilled trades apprentice program and full-time employees with benefits.

A Health Care Youth Apprenticeship program began in August 1994 at two local hospitals. Franklin High School's Bioscience and Health Careers Academy juniors work and train with health care professionals from Rochester General and Strong Memorial Hospitals. Successful youth apprentices will receive three post-secondary credits from Monroe Community College through the Tech/Prep program; opportunities for hospital employment; and/or full-time enrollment in a postsecondary degree or certificate program.

A Manufacturing Youth Apprenticeship lead by Bausch & Lomb is in the development stage and is expected to begin in September 1995.

Tech Prep

Tech Prep combines the last two years of high school with a two-year program at Monroe Community College. Two Rochester high schools, East and Franklin, are participating in Tech Prep programs concentrating in three career areas: financial services, allied health and mechanical technology. Students take part in an academic program in high school that links English, math, science and social studies directly to their career interests. Paid workplace experience in the student's area of interest is also offered. The program culminates with students earning an associate's degree, which allows them to continue on to a four-year program or enter the workforce.

APPENDIX F

The Rochester Business Education Alliance: An Overview

In 1992, the National Center on Education and the Economy formed the Rochester Business Education Alliance (RBEA) to respond to the challenge of implementing *America's Choice: high skills or low wages!* recommendations in Rochester and to assist the District in restructuring its education system. The RBEA's aim is to help the Rochester City School District educate and train successful students who will become members of a world-class workforce in Rochester, and involved, critical-thinking citizens.

The Rochester Business Education Alliance is an employer organization consisting of representatives from large and small, multi-industry companies, the Rochester City School District, county and city government, colleges and universities, the Chamber of Commerce and the Industrial Management Council. Currently, the Rochester Business Education Alliance has 37 members, who represent 30 different organizations located in Monroe County, including Eastman Kodak Company, Xerox Corporation, the University of Rochester, Rochester Institute of Technology, Rochester Gas & Electric, Rochester Telephone, Blue Cross/Blue Shield, Wegmans Food Markets, Inc. and Hansford Manufacturing, among others.

The RBEA acts as a catalyst for and provides support to the Rochester City School District by concentrating its support on the District's 12 Community Alliance Schools in three areas: outcomes and standards; school-to-work transition; and applying high performance work organization concepts and practices to education. One of RBEA's primary foci is to build a support network for students through a youth advocacy/work scholarship model. The RBEA is also working to expand the number of companies involved in providing school-to-work transition opportunities for students through the Rochester Work-Scholarship Connection and youth apprenticeship programs.

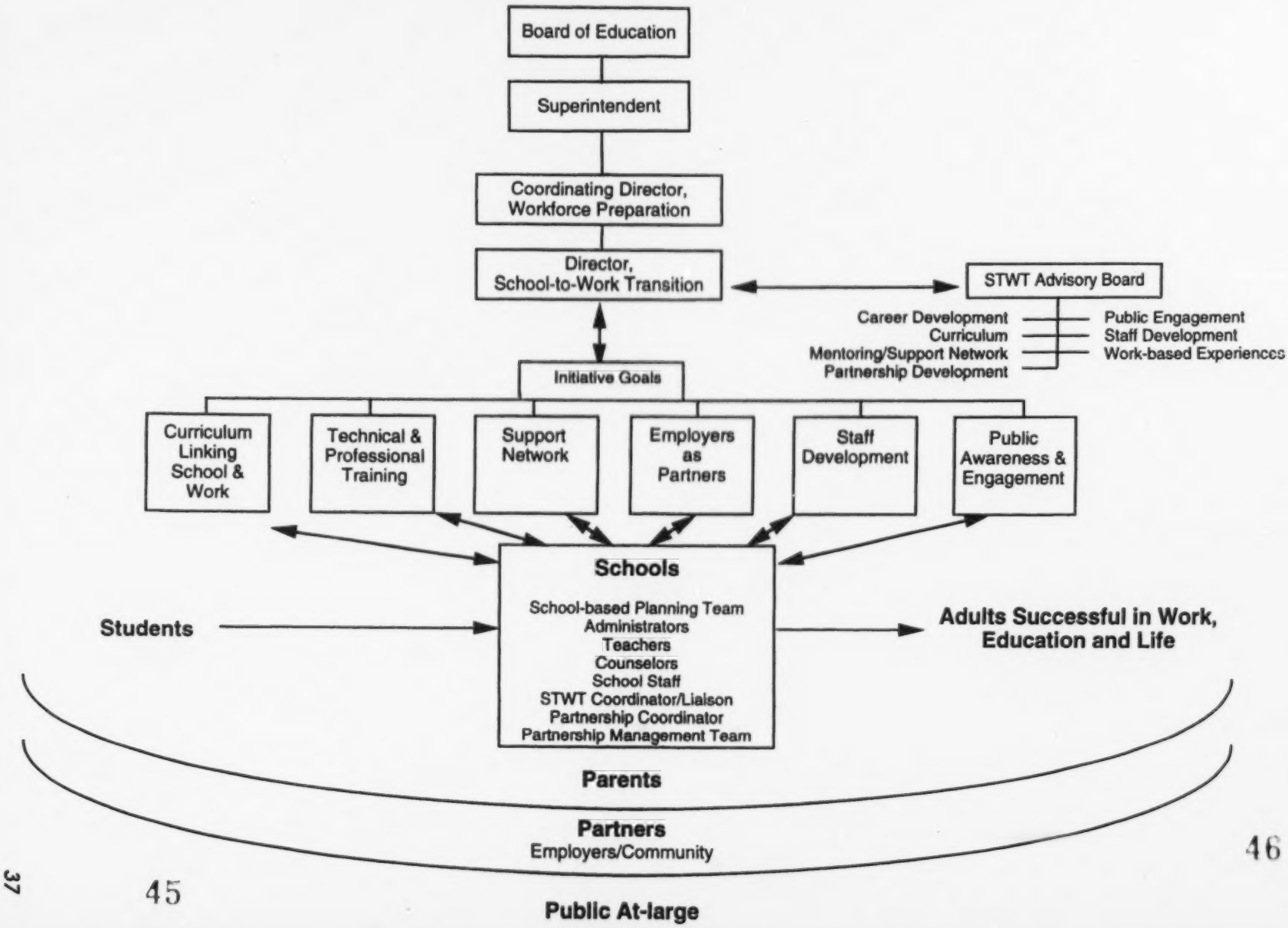
APPENDIX G

Roles and Responsibilities of School-to-Work Transition Director and Rochester City School District Organizational Infrastructure Chart

The roles and responsibilities of the school-to-work transition director are to:

- manage implementation efforts;
- determine resource needs;
- obtain funding and resources to support needs;
- form and coordinate implementation teams to carry out work defined by the strategic framework and annual operating plans;
- assemble and lead a School-to-Work Transition Advisory Board;
- arrange for the provision of extensive career awareness and exploration activities to help students make career decisions;
- develop new programs and establish program sponsors;
- work to create school-to-work transition opportunities for students and staff;
- report to the Board of Education on progress of implementation efforts;
- monitor program and activity quality, delivery and progress and propose and implement changes;
- maintain ongoing communication with school staff, employers, parents and postsecondary and community representatives to build awareness and involvement in school-to-work;
- benchmark with other school-to-work transition efforts across the country;
- market the District's effort to create a school-to-work transition system; and
- provide staff development.

Rochester City School District School-to-Work Transition
Organizational Infrastructure



APPENDIX H

Rochester's School-to-Work Transition Advisory Board

Community Agencies

Big Brothers/Big Sisters
Boy Scouts of America
Center for Educational Development
Junior Achievement
National Center on Education and the Economy
Urban League

Educators

Teachers and Administrators — Elementary, Middle and High School
Rochester District Parent Council
Rochester School and Business Alliance
Non-Teaching School Staff
Central Office Staff (Guidance; Curriculum Development and Support; Parent and Community Involvement)

Employers

AC Rochester
Eastman Kodak Company
Industrial Management Council
Private Industry Council
Rochester General Hospital
St. Mary's Hospital
Wegmans Food Markets, Inc.
Xerox Corporation

Government

New York State Department of Labor
City of Rochester Office of Employment and Training

Postsecondary Education

Monroe Community College
Rochester Institute of Technology

Students

Unions/Labor

UAW

NATIONAL CENTER ON EDUCATION AND THE ECONOMY PUBLICATIONS AND VIDEOCASSETTES

	Price
A Nation Prepared: Teachers for the 21st Century (1986, 135 pages) *The Report of the Taskforce on Teaching as a Profession for the Carnegie Forum on Education and the Economy*	**1-9 copies, $9.95 each ppd.** **10+ copies, $6.95 each ppd.**
America's Choice: *high skills or low wages!* (1990, 147 pages) *The Report of the Commission on the Skills of the American Workforce*	**1-9 copies, $19.95 each ppd.** **10+ copies, $16.95 each ppd.**
A Human Resources Development Plan for the United States (1992, 27 pages) *Marc Tucker*	**$7.50 each ppd.**
Thinking for a Living: Education and the Wealth of Nations (1992, 283 pages) *Ray Marshall and Marc Tucker*	**$24.00 each ppd.**
Effective Public Engagement (1993, 35 pages) *This handbook produced by the New Standards Project describes how to communicate with the public about academic standards.*	**$20.00 each ppd.**
The Business of High Performance (1994, 14 minutes) *A videocassette that defines a high performance work organization and shows examples of companies that have reorganized work to effectively use their highly skilled workforces and improve their performance.*	**$34.95 each ppd.**
The Certificate of Initial Mastery: A Primer (1994, 20 pages) *National Center on Education and the Economy*	**$9.95 each ppd.**
States Begin Developing the Certificate of Initial Mastery (1994, 12 pages) *National Center on Education and the Economy*	**$9.95 each ppd.**
The International Experience with School Leaving Examinations (1994, 12 pages) *National Center on Education and the Economy*	**$9.95 each ppd.**
Buy ***The Certificate of Initial Mastery: A Primer, States Begin Developing the Certificate of Initial Mastery,*** *and* **The International Experience with School Leaving Examinations** *together for*	**$24.95 ppd.**

Publications and Videocassettes Continued

Designing the New American High School (1994, 19 pages) *Marc Tucker*	**$9.95 each ppd.**
A School-to-Work Transition System for the United States (1994, 20 pages) *Marc Tucker*	**$9.95 each ppd.**
Common Standards: A Common-Sense Approach (1994) *Phil Daro*	**$9.95 each ppd.**
Designing Performance-Driven Schools (1994) *Marc Tucker*	**$9.95 each ppd.**
Building a System to Invest in People: States on the Cutting Edge (1995) *National Center on Education and the Economy*	**$16.95 each ppd.**
"New Standards: Only Our Best Is Good Enough" (1994, 15-minute video) *National Alliance for Restructuring Education*	**$9.95 each ppd.**
"High Performance Schools: No Exceptions, No Excuses" (1994, 17-minute video)	**$9.95 each ppd.**

Shipping and handling costs are included in the price of each item.

ROCHESTER'S SCHOOL-TO-WORK TRANSITION PRODUCTS/PUBLICATIONS

Rochester City School District	*Price*
• "What Is School-to-Work Transition?": a Video, January 1994	**$15.00**
• "Rochester Youth Apprenticeship": a Video	**$5.00**
• *Rochester School-to-Work Transition Initiative Brochure,* January 1994 (English and Spanish versions)	**$5.00**
• *School Partnership Survey Questionnaire and Report on Results,* 1992-93	**$5.00**
• *Work-based Learning Resource Manual,* August 1994	**$5.00**
• *Partnership Guidebook: A Resource Manual for the Rochester Community to Learn, Work and Succeed Together,* December 1993	**$5.00**
• *The Rochester School-to-Work Transition Initiative: A Proposal,* October 1991	**$5.00**
• *Rochester Area Youth Apprenticeship Model,* January 1993	**$5.00**
• *Steps and Corresponding Timeline for How To Implement a Youth Apprenticeship Program,* August 1994	**$5.00**
• *Draft Applied Learning Skills Evaluation Tool,* August 1993	**$5.00**
• *Skilled Trades Youth Apprenticeship Program Brochure and Handbook,* July 1993	**$5.00**
• *Health Care Youth Apprenticeship Program Overview Materials and Workblock Notebook,* August 1994 — includes technical skills requirements and applied learning competencies in seven occupational areas: EKG/cardiology; diagnostic radiology; nursing; physical and occupational therapy; laboratory; respiratory care; and patient and materials transport.	**$26.00**

For copies of these products, please send check or purchase order to **School-to-Work Transition Initiative, Rochester City School District, 131 West Broad Street, Rochester, NY 14614, 716-262-8382. Please make checks payable to Rochester City School District.**